UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,584	12/18/2001	Ki Hyun Chung	HI-0048	6148

34610	7590	03/18/2005	**EXAMINER**	
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CHANTILLY, VA 20153		**ART UNIT**	**PAPER NUMBER**	
		2187		

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/017,584	CHUNG, KI HYUN
	Examiner	Art Unit
	Jesse Diller	2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 January 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15-26* is/are allowed.

6)☒ Claim(s) *1-6,9 and 12-14* is/are rejected.

7)☒ Claim(s) *7,8,10,11,15,20 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03 January 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Examiner acknowledges receipt of the amendment in response to the office

action dated 9/2/2004, which amendment was received 01/03/2005.   At this point,

claims 1, 4-5, 12, 15-20, 25 have been amended.   Thus, claims 1-26 are now pending in

the application.

Objections to the disclosure

2.   In response to amendment, the objection to the drawings is withdrawn.

3.   It is noted that while pars. 7 and 9, and one instance in par. 27 has been

amended, numerous other instances of references to multiple names per index in pars.

27-28 and elsewhere (as noted in Par. 6 of the previous office action) have not been

corrected.   Therefore, the objection to the specification is maintained.   Applicant is

encouraged to carefully review the specification and to correct any such inconsistencies

that may be found.

Response to Arguments

4.   **Applicant's arguments filed 1/3/05 with respect to the 35 USC 102 rejection**

by Roberson of claim 5 have been fully considered but they are not persuasive.

5.   Applicants contend that "each of the data fields in the databases in Robertson

are not assigned the same index number," and that "the affinity ID 420-2, Fig. 6 is not

assigned the same index number as the customer ID".   The examiner would like to point

out that *the CustomerID has been taken to be the index which is common to the data*

fields of a same class. All the fields pertaining to a single person (for instance, the

AffinityID and GroupID from affinity table record 420, the username and password from

the Customer table record 440, and the Phone, Address, and Travel_Event fields in

records 480, 500, and 520) are associated with the same index, which is the

CustomerID. See Col. 5, lines 6-8. There are multiple Affinity records, for example,

allocated in the Affinity Table in the database, and the CustomerID is an index number

which uniquely identifies the Affinity record (and the data items in the fields of the

record) which are related to a specific person (See Col. 5, lines 5-6, 21, and 52-54).

6.   As for the allegations that Gusack and Bates also do not teach the claimed

features, the Examiner would like to point out that Gusack and Bates were not relied

upon to teach the limitations of claim 5.

7.   Therefore, the rejection of claims 1 and 5 by Robertson are seen to be proper.

Specification

8.   **The specification** is objected to because of the following informalities:

- On page 6, paragraph 27, line 8, and paragraph 28, lines 2,3, and 9, reference is made to: "the [second] name for index No. [2]." Unless applicant intended to disclose indices with multiple names for a single index, these occurrences should be modified to correspond with Page 6, paragraph 28, lines 6, where a "phone number, associated with the first name and having index No. 1" is disclosed.

- A suggested resolution is "the [second] name, which is associated with index No. [2]."

9.   **The title** of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title are suggestions:

- "Dynamically Storing PIM / Address Book Data by Type."
- "Relational Database Storing PIM / Address Book Data."

Appropriate correction is required.

10.   The applicant is encouraged to carefully examine the specification and claims to ensure internal consistency of terms, and to correct any noted problems.

Claim Objections

11.   It appears that the third step in method claim 15 should be amended to read, in

part,

> "...sequentially storing data having a corresponding
> index number and that corresponds to a respective field
> group in a next available memory location in the field
> group."

for clarity. See line 4 of claim 15, where fields are allocated in the groups they

correspond to, and also claim 10 and Fig. 3)

12.   Claim 20 is also objected to, because it appears that in line 5, "a given one of the

plurality of data groups" should read "a class of data", and that "group" in lines 7 and 8

should be replaced by "class" in order to be in harmony with the specification. The

specification states that a common index number is given to each field in the memory

which belongs to a common class, namely a single individual. See Fig. 3, where each

field in a group is *not* given a common index, and also par. 25.

13.   As noted in page 17 of the amendment submitted 1/3/2005, the specification

amendments define a 'group' to be data items (fields) of the same type, i.e., the

collections of names, phone numbers, etc. shown in Fig. 3. For clarity, therefore, if

claim 20 was intended to claim the inputting of a 'group' of data items of differing types

but relating to a single individual, the language of the claim should not conflict with the

language used by the specification.

14.   The same language objected to in claim 20 is also present in Claim 25, and

Claim 25 is also objected to for the same reasons.

Claim Rejections - 35 USC § 112

15.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

16.   **Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

17.   Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

18.   In the previous office action, it was noted that field, field memory, and memory area were not defined clearly, or used ambiguously.

19.   The Microsoft Computer Dictionary (2002: Microsoft Corporation) defines a "field" as a location in a record, or a space in a form, which "holds *a specific item* of information." This definition is the 'ordinary meaning,' and is used in the present disclosure. However, the disclosure also used the term to refer to a collection of items of information, similar to a "record" or "data structure." These two meanings were used in the disclosure interchangeably, with no differentiation. The disclosure also used the

terms "memory area" and "field memory" interchangeably with "field," after initially

defining them otherwise.

20.   As noted in Page 17 of the Amendment received 1/3/2005, the specification has

been amended to use the terms "memory area," "groups," and "fields," and to clear up

the ambiguity of use previously noted.

21.   However, claim 14 has not been amended, and lines 3 and 4 state that there are

multiple data areas in the memory region for each field, and that data can be moved

from one area to another within the field. This is to be contrasted with Fig. 3 and Par.

30, where data is moved from one field to another within a group. Therefore, the

ambiguity of use remains in the claims. The term "field" as used in claim 14 is still used

contrary to the accepted meaning. The term is indefinite because the specification does

not clearly redefine the term, and in fact has been amended to more clearly define 'field'

to have its 'ordinary meaning.'

22.   The applicant is encouraged to carefully examine all of the claims to ensure

internal consistency of terms, and to correct any noted problems.

23.   For prior art examination, claim 14 has been taken to read:

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The method of claim 12, wherein the memory area is divided
into memory regions corresponding to data fields, and
wherein data is saved in a corresponding memory region of
each field in index order, and the data can be shifted
automatically from a first field to a second field in the
memory area to maintain the index order.
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Claim Rejections - 35 USC § 102

24.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

25.   **Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by**

Gusack (U.S. Patent # 6,112,209).

26.   **With respect to claim 1,** Gusack teaches a method for using a memory area

(Col. 67, lines 42-43 teach that the information is "stored on electronic-based media in a

computer"), comprising:

- assigning a memory region (609 and 611, Fig. 6 define a domain start and end

    for a memory region) to each of a plurality of data fields (Col. 7, lines 27-29

    describe a plurality of data fields collated into a "table", and Col. 7, lines 29-30

    refer to multiple tables);

- designating an index number (603, Fig. 9 shows an index number) according to

    types of data (605, Fig. 9 ties the index number to data tables, items 903 and

    917, showing differing types of data) in the memory region; and

- assigning a common index number to a plurality of data items in the plurality of data fields that belong to a same class (See Fig. 9; For the plurality of phone numbers associated with the class of information related to Stephanie Cook, they are assigned the common index number 4. see CLTF INDEX 913; numbers 103 and 106 are both assigned to individual number 4).

27.   **With respect to claim 2**, Gusack teaches that:

- data is saved in each of the plurality of field by an individual index number (See Fig. 9; data is saved in all fields with an L number; names are stored with individual L numbers 1-5, phone numbers with L numbers 101-106).

28.   **With respect to claim 3**, Gusack teaches that:

- The plurality of fields (i.e., table) comprises at least one of a name field, a company name field, an e-mail address field, a telephone number field, and a fax number field. (905, 907, 919, Fig. 9)

29.   **With respect to claim 4**, Gusack teaches that:

- The data corresponds to information regarding an individual (See Fig. 1; data regards individuals)

30.   No patentable weight has been given to "mobile communications terminal," because the claims are able to stand on their own, being generic and independent of implementation choice. "Mobile communications terminal" appears simply to be a preferred enclosure.

31.   **Claims 1, 5-6, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Robertson (U.S. Patent # 6,269,369 B1).**

32.   **With respect to claim 1**, Robertson teaches a method for using a memory area (Col. 67, lines 42-43 teach that "the database contains contact information"; said database 240 exists in a computer server 230, Fig. 4), comprising:

- assigning a memory region to each of a plurality of data fields (i.e., tables; Col. 5, line 9 refers to fields in a table; Col. 7, lines 46-47 teach that information is contained in the tables 350 of the database 340 on a server 330, shown in Fig. 4);

- designating an index number according to types of data in the memory region. (Col. 4, line 65-Col 5, line 4 number the tables, and show the different types of data in the tables); and

- assigning a common index number (CustomerID, #420-21, 440-41, 440-43, Fig. 6) is to a plurality of data items belonging to a same class,

33.   **With respect to claim 5,** Robertson teaches that:

- each of the plurality of data items belonging to the class is associated with a different data field (Col. 5, 6-9 teaches that all the data relating to a single class, that of a member, is linked by a common CustomerID number).

34.   **With respect to claim 6**, Robertson teaches that:

- each class represents a single person (Col. 5, 6-9 teaches that all the data relating to a single person is linked by a common CustomerID number).

35.   **With respect to claim 9,** Robertson teaches that:

- a prescribed memory region is accessed (Col. 16, lines 34-40 teach accessing

    and subsequent processing of the data in a prescribed memory region, that of

    the Group table) by inputting the index number or a key word (Col. 16, line 33

    teaches that the group name, a key word, is submitted).

36.   No patentable weight has been given to "mobile communications terminal,"

because the claims are able to stand on their own, being generic and independent of

implementation choice. "Mobile communications terminal" appears simply to be a

preferred enclosure.

Claim Rejections - 35 USC § 103

37.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

38.   **Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Bates (U. S. Patent # 6,247,043 B1) in view of Robertson.

39.   **With respect to claim 12,** Bates teaches:

- A method for using a memory area in a mobile communications terminal (Col. 5,

    lines 50-51 teach that the invention may be in a mobile computer; Col. 5, line 58

    – Col. 6, line 4 teach memories. The "mobile computer" is shown to include

communication equipment in Col. 6, lines 21-25; also see Figs 1 and 2),

comprising:

- Inputting data in a memory area by a user (Figs. 8, 9; 122, Fig. 7. "In a memory

  area" is inherent in data entry for any computer system – all information is stored,

  however temporarily, in a memory.);

- Searching for the existence of a corresponding index of the entered data (146,

  Fig. 10 shows a search for an entry corresponding to the entered data. "The

  Authoritative Dictionary of IEEE Standards Terms" defines an index as "a data

  item that identifies a particular element in a set of items such as an array." Col.

  9, line 36 identifies a field 94, (the name field), as identifying the user entry 92 of

  Fig. 5. Therefore, the name field 94 of Fig. 5 reads on claim 12.); and

- Updating the relevant data if the corresponding index is found (146 and 150, Fig.

  10 show an update to the data entry 92, Fig. 5 if the search was successful).

40.   Bates does not expressly teach the details of the storage system, i.e., the

database, and does not teach assigning a same index number to a plurality of data

items respectively stored in the memory area that belongs to a same class.

41.   However, as noted above in the section entitled *Claim Rejections – 35 USC §*

102, Robertson teaches a method of storing data in a memory area, including:

- assigning a common index number (CustomerID, #420-21, 440-41, 440-43, Fig.

  6) is to a plurality of data items belonging to a same class (i.e., the same person;

  see Col. 5, lines 6-9)

42.   Bates and Robertson are analogous art because they are from the same general

problem-solving area, namely applications that work with databases.

43.   At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to use the database system of Robertson to store data for the system of

Bates. One motivation is found in Robertson, on Col. 6, lines 36-39, namely that the

storage system of tables as taught permits good access speed and scaling.

44.   Therefore, it would have been obvious to modify the system of Bates by using

the storage system of Robertson, for the motivations above, thereby obtaining the

invention as specified in claim 12.

45.   **With respect to Claim 13**, Bates further teaches:

- Creating a new index for the entered data if the corresponding index does not

    exist (146 and 148, Fig. 10 shows the creation of a new entry in the table, which

    entry includes an index 94, Fig. 5 if the search for the index was not successful).

46.   For the purpose of examination, "*corresponding* index" has been taken to mean

"a related index," because more specific criteria for correspondence have not been

defined.

Allowable Subject Matter

47.   Claims 15, 20, and 25 are objected to, but allowable over the prior art.

48.   Claims 16-19, 21-24, and 26 are allowed.

49.   Claims 7-8, 10, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

50.   Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

51.   The primary reasons for allowance of claims 7-8, 10, 11, and 14, 15, 20, and 25 in the instant application is the combination with the inclusion in these claims that the data items in the fields are allocated in assigned memory slots and may later be shifted to a different memory slot. The prior art of record neither anticipates nor renders obvious the above recited combination.

52.   If the applicant should choose to rewrite the independent claims to include the limitations recited in either one of claims 7-8, 10, 11, and 14, the applicant is encouraged to amend the title of the invention such that it is descriptive of the invention as claimed as required by sec. 606.01 of the MPEP. Furthermore, the Summary of the Invention and the Abstract should be amended to bring them into harmony with the allowed claims as required by paragraph 2 of sec. 1302.01 of the MPEP.

Conclusion

53.   As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and § 707.07(a) of the M.P.E.P.

54.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kori, US Patent 6,397,223, and Shutt, US Patent 6,169,993, disclose databases which store personal information grouped by type and class.

55.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

56.   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
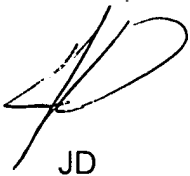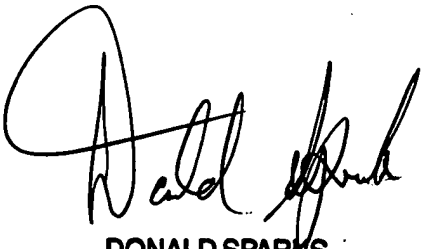
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesse Diller whose telephone number is (571)272-4173. The examiner can normally be reached on 8:30AM-5:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JD

DONALD SPARKS
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